

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Jingrui Wu et al.  
Serial No: 10/678,588  
Filed: 10/02/2003  
For: Yield-Improved Transgenic Plants

Art Unit: 1638  
Examiner: Vinod Kumar

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APR 28 2006

**Request for Correction of Inventorship under 37 C.F.R. § 1.48(c)**

Commissioner for Patents

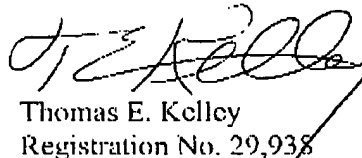
Dear Sir:

The claims in the above-referenced nonprovisional application have been amended to claim subject matter that was disclosed, but not claimed, in the application as originally filed, and which requires correction to add inventors not named in the application.

Therefore, it is hereby requested that Kristine Hardeman, Michael Edgerton and Thomas LaRosa be added as inventors for Application No. 10/678,588, by the filing of this Request which is supported by

- (1) a statement from each of the three inventors being added that their addition is necessitated by amendment of the claims and that the inventorship error occurred without deceptive intention on his or her part;
- (2) written consent of the assignee, Monsanto Technology;
- (3) a processing fee transmittal for payment of the \$130.00 processing fee specified in 37CFR 1.17(i) for correcting inventorship under §1.48; and
- (4) a declaration by the actual inventors as required by 37 C.F.R. § 1.63.

Respectfully submitted,

  
Thomas E. Kelley  
Registration No. 29,938  
Applicant's Attorney  
Phone: 860-572-5274

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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For: Yield-Improved Transgenic Plants

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Examiner: Vinod Kumar


**Statement of Lack of Deceptive Intent  
Pursuant to 37 C.F.R. § 1.48(c)**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

The above-referenced non-provisional application, as filed, disclosed unclaimed subject matter by an inventor or inventors not named in the application, i.e. Michael Edgerton, Thomas LaRosa and Kristine Hardeman. The application is being amended to add claims to that subject matter and name the correct inventors. Accordingly, as an added inventor I say that the addition of inventors is necessitated by the amendment of the claims and that the inventorship error occurred without deceptive intent on my part.

Respectfully submitted,

  
Michael Edgerton

18 April 2006  
Date

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Pursuant to 37 C.F.R. § 1.48(c)**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

The above-referenced non-provisional application, as filed, disclosed unclaimed subject matter by an inventor or inventors not named in the application, i.e. Michael Edgerton, Thomas LaRosa and Kristine Hardeman. The application is being amended to add claims to that subject matter and name the correct inventors. Accordingly, as an added inventor I say that the addition of inventors is necessitated by the amendment of the claims and that the inventorship error occurred without deceptive intent on my part.

Respectfully submitted,

  
Kristine Hardeman

4-24-06  
Date

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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Filed: 10/02/2003  
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Art Unit: 1638  
Examiner: Vinod Kumar

**Statement of Lack of Deceptive Intent  
Pursuant to 37 C.F.R. § 1.48(c)**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

The above-referenced non-provisional application, as filed, disclosed unclaimed subject matter by an inventor or inventors not named in the application, i.e. Michael Edgerton, Thomas LaRosa and Kristine Hardeman. The application is being amended to add claims to that subject matter and name the correct inventors. Accordingly, as an added inventor I say that the addition of inventors is necessitated by the amendment of the claims and that the inventorship error occurred without deceptive intent on my part.

Respectfully submitted,

  
Thomas J. La Rosa

April 21, 2006  
Date

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of Jingrui Wu et al.  
Serial No: 10/678,588  
Filed: 10/02/2003  
For: Yield-Improved Transgenic Plants

Art Unit: 1638  
Examiner: Vinod Kumar

**Consent of Assignee to Correction of Inventorship**

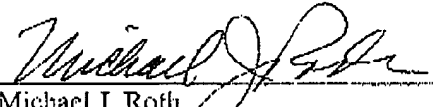
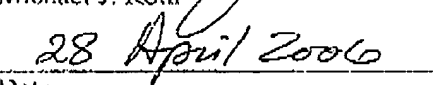
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

*Attention: Director of OIPE*

Sir:

On behalf of Monsanto Technology LLC, I hereby give consent to the addition of Kristine Hardeman, Michael Edgerton and Thomas Lakosa as inventors in the above-referenced non-provisional application.

Monsanto Technology LLC

  
\_\_\_\_\_  
Michael J. Roth  
  
\_\_\_\_\_  
Date

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Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention relating to **Yield-Improved Transgenic Plants**, the specification of which was filed on October 2, 2003 as United States Application Number 10/678,588, including the claims as amended in the Listing of Claims shown below.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended in the Listing of Claims shown below.

I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

<u>60/463,787</u>	<u>04/18/2003</u>
(Application No.)	(Filing Date)

<u>60/425,157</u>	<u>11/08/2002</u>
(Application No.)	(Filing Date)

<u>60/415,758</u>	<u>10/02/2002</u>
(Application No.)	(Filing Date)

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

<u>09/865,439</u>	<u>05/29/2001</u>	<u>abandoned on Nov 18, 2003</u>
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)

I hereby appoint the practitioners associated with Customer No. 27161 and 28381 as my attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

**Listing of Claims:**

**Claim 1** - A method for improving yield in a crop exposed to water deficit by providing a transgenic seed for said crop wherein said transgenic seed has a recombinant DNA construct expressing a gene which encodes a Hap3 protein having an amino acid sequence identical to the consensus amino acid sequence of SEQ ID NO:8 wherein said gene is constitutively expressed to produce an effective amount of said protein for water-deficit tolerance functionally equivalent to the water-deficit-tolerance imparted by the protein of SEQ ID NO:2 in corn or SEQ ID NO:6 or SEQ ID NO:7 in soybean.

**Claim 2** - A method of claim 1 wherein said crop is corn, soybean, canola, wheat, rice, cotton or grass.

**Claims 5** - A method for improving water-deficit survivability of a crop plant comprising introducing into the genome of said plant a recombinant DNA construct expressing a gene which encodes a Hap3 protein having an amino acid sequence identical to the consensus amino acid sequence of SEQ ID NO:8 wherein said gene is constitutively expressed to produce an effective amount of said protein for water-deficit tolerance functionally equivalent to the water-deficit-tolerance imparted by the protein of SEQ ID NO:2 in corn or SEQ ID NO:6 or SEQ ID NO:7 in soybean.

**Claim 6** - A water-deficit-tolerant, transgenic, hybrid maize plant comprising a recombinant DNA construct expressing a gene which encodes a Hap3 protein having an amino acid sequence identical to the consensus amino acid sequence of SEQ ID NO:8 wherein said gene is constitutively expressed to produce an effective amount of said protein for water-deficit tolerance functionally equivalent to the water-deficit-tolerance imparted by the protein of SEQ ID NO:2.

**Claim 7** - A water-deficit-tolerant, transgenic soybean plant comprising a recombinant DNA construct expressing a gene which encodes a Hap3 protein having an amino acid sequence identical to the consensus amino acid sequence of SEQ ID NO:8 wherein said gene is constitutively expressed to produce an effective amount of said protein for water-deficit tolerance functionally equivalent to the water-deficit-tolerance imparted by the protein of SEQ ID NO:6 or SEQ ID NO:7 in soybean.

**Claim 8** - A transgenic maize seed for producing the water-deficit-tolerant, transgenic, hybrid maize of claim 6 having in its genome a recombinant DNA construct which expresses a gene which encodes a Hap3 protein having a consensus amino acid sequence of SEQ ID NO: 8 and a gene imparting herbicide resistance.

**Claim 9** - A seed of claim 8 wherein said gene imparting herbicide resistance provides resistance to an herbicide selected from the group consisting of a glyphosate herbicide, a phosphinothricin herbicide, an oxynil herbicide, an imidazolinone herbicide, a dinitroaniline herbicide, a pyridine herbicide, a sulfonylurea herbicide, a bialaphos herbicide, a sulfonamide herbicide and a glufosinate herbicide.

**Claim 10** - A seed of claim 8 wherein said genome further comprises a recombinant DNA construct which expresses a gene encoding an insecticidal protein.

**Claim 11** - A seed of claim 10 wherein said insecticidal protein is a delta endotoxin from *Bacillus thuringiensis*.

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**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

## Listing of Claims (continued)

Claim 12 - A seed of claim 8 wherein said genome further comprises a recombinant DNA construct which is transcribed to RNA which forms gene silencing dsRNA targeted to a crop pest.

Claim 13 - A plant produced from a seed of claim 8.

Claim 14 - A water-deficit-tolerant, transgenic, hybrid maize plant of claim 6 wherein said recombinant DNA comprises a promoter operably linked to native corn DNA encoding the protein with the amino acid sequence of SEQ ID NO:2.

Claim 15 - A recombinant DNA construct comprising a promoter operably linked to native corn DNA encoding the protein with the amino acid sequence of SEQ ID NO:2.

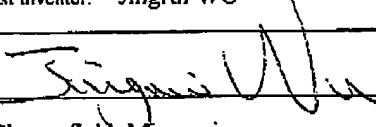
- Page 3 of 6 -



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Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
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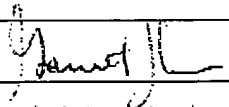
Full name of sole or first inventor: Jingrui WU	
Inventor's signature 	Date April 5, 2006
Residence Chesterfield, Missouri	
Citizenship US	
Post Office Address 628 Stablestone Drive, Chesterfield, Missouri 63017, USA	
Full name of second inventor: Garrett J. LEE	
Inventor's signature	Date
Residence Royersford, Pennsylvania	
Citizenship US	
Post Office Address 307 Cambridge Drive, Royersford, Pennsylvania, USA 19468	
Full name of third inventor: Thomas R. ADAMS	
Inventor's signature	Date
Residence North Stonington, Connecticut	
Citizenship US	
Post Office Address 12 Mystic Road, North Stonington, Connecticut 06359, USA	

- Page 4 of 6 - (2)

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Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

Full name of sole or first inventor: Jingrui WU	
Inventor's signature	Date
Residence	Chesterfield, Missouri
Citizenship	US
Post Office Address	628 Stablestone Drive, Chesterfield, Missouri 63017, USA
Full name of second inventor: Garrett J. LEE	
Inventor's signature 	Date 04/11/06
Residence	Royersford, Pennsylvania
Citizenship	US
Post Office Address	307 Cambridge Drive, Royersford, Pennsylvania, USA 19468
Full name of third inventor: Thomas R. ADAMS	
Inventor's signature	Date
Residence	North Stonington, Connecticut
Citizenship	US
Post Office Address	12 Mystic Road, North Stonington, Connecticut 06359, USA

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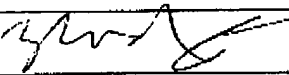
Full name of sole or first inventor: Jingrui WU	
Inventor's signature	Date
Residence	Chesterfield, Missouri
Citizenship	US
Post Office Address	628 Stablestone Drive, Chesterfield, Missouri 63017, USA
Full name of second inventor: Garrett J. LEE	
Inventor's signature	Date
Residence	Royersford, Pennsylvania
Citizenship	US
Post Office Address	307 Cambridge Drive, Royersford, Pennsylvania, USA 19468
Full name of third inventor: Thomas R. ADAMS	
Inventor's signature	Date
Residence	North Stonington, Connecticut
Citizenship	US
Post Office Address	12 Mystic Road, North Stonington, Connecticut 06359, USA

- Page 4 of 6 - (c)

Page 5 of 6

Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

Full name of fourth inventor: Zhidong XIE	
Inventor's signature 	Date 04/09/2006
Residence Maryland Heights, Missouri 63043	
Citizenship PEOPLE'S REPUBLIC OF CHINA	
Post Office Address 27 Lansing Avenue, Maryland Heights, Missouri 63043, USA	
Full name of fifth inventor: Stanton B. DOTSON	
Inventor's signature	Date
Residence Chesterfield, Missouri	
Citizenship US	
Post Office Address 379 Palomino Hill Court, Chesterfield, Missouri 63005, USA	
Full name of sixth inventor: Donald E. NELSON	
Inventor's signature	Date
Residence Stonington, Connecticut	
Citizenship US	
Post Office Address 4 Shawondasse Drive, Stonington, Connecticut 06378, USA	

- Page 5 of 6 - (a)

Page 5 of 6

Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

Full name of fourth inventor: Zhidong XIE	
Inventor's signature	Date
Residence	Maryland Heights, Missouri 63043
Citizenship	PEOPLE'S REPUBLIC OF CHINA
Post Office Address	27 Lansing Avenue, Maryland Heights, Missouri 63043, USA
Full name of fifth inventor: Stanton B. DOTSON	
Inventor's signature	Date
Residence	Chesterfield, Missouri
Citizenship	US
Post Office Address	379 Palomino Hill Court, Chesterfield, Missouri 63005, USA
Full name of sixth inventor: Donald E. NELSON	
Inventor's signature	Date
Residence	Stonington, Connecticut
Citizenship	US
Post Office Address	4 Shawondasse Drive, Stonington, Connecticut 06378, USA

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Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
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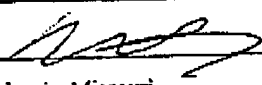
Full name of fourth inventor: Zhidong XIE	
Inventor's signature	Date
Residence: Maryland Heights, Missouri 63043	
Citizenship: PEOPLE'S REPUBLIC OF CHINA	
Post Office Address: 27 Lansing Avenue, Maryland Heights, Missouri 63043, USA	
Full name of fifth inventor: Stanton B. DOTSON	
Inventor's signature	Date
Residence: Chesterfield, Missouri	
Citizenship: US	
Post Office Address: 379 Palomino Hill Court, Chesterfield, Missouri 63005, USA	
Full name of sixth inventor: Donald E. NELSON	
Inventor's signature: <i>Donald E. Nelson</i>	Date: <i>4/5/2006</i>
Residence: Stonington, Connecticut	
Citizenship: US	
Post Office Address: 4 Shawondassce Drive, Stonington, Connecticut 06378, USA	

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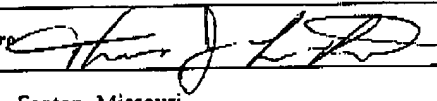
Full name of seventh inventor: Michael D. EDGERTON	
Inventor's signature 	Date 4 April 2006
Residence St. Louis, Missouri	
Citizenship US	
Post Office Address 1 Yale Avenue, St. Louis, Missouri 63130, USA	
Full name of eighth inventor: Thomas J. LA ROSA	
Inventor's signature	Date
Residence Fenton, Missouri	
Citizenship US	
Post Office Address 651 Green Forest Drive, Fenton, Missouri 63026, USA	
Full name of ninth inventor: Kristine HARDEMAN	
Inventor's signature	Date
Residence Westerly, Rhode Island 02891	
Citizenship US	
Post Office Address 14 South Drive, Westerly, Rhode Island 02891, USA	

- Page 6 of 6 - (a)

Page 6 of 6

Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

Full name of seventh inventor: Michael D. EDGERTON	
Inventor's signature	Date
Residence	St. Louis, Missouri
Citizenship	US
Post Office Address	1 Yale Avenue, St. Louis, Missouri 63130, USA
Full name of eighth inventor: Thomas J. LA ROSA	
Inventor's signature 	Date April 15, 2006
Residence	Fenton, Missouri
Citizenship	US
Post Office Address	651 Green Forest Drive, Fenton, Missouri 63026, USA
Full name of ninth inventor: Kristine HARDEMAN	
Inventor's signature	Date
Residence	Westerly, Rhode Island 02891
Citizenship	US
Post Office Address	14 South Drive, Westerly, Rhode Island 02891, USA

- Page 6 of 6 - (4)



Page 6 of 6

Atty. Docket No. 38-21(52578)C

**Combined Declaration and Power of Attorney  
for Application Serial No. 10/578/588**

Full name of seventh inventor: Michael D. EDGERTON	
Inventor's signature	Date
Residence	St. Louis, Missouri
Citizenship	US
Post Office Address	1 Yale Avenue, St. Louis, Missouri 63130, USA
Full name of eighth inventor: Thomas J. LA ROSA	
Inventor's signature	Date
Residence	Fenton, Missouri
Citizenship	US
Post Office Address	651 Green Forest Drive, Fenton, Missouri 63026, USA
Full name of ninth inventor: Kristine HARDEMAN	
Inventor's signature <i>Kristine J. Harde man</i>	Date <i>4-6-06</i>
Residence	Westerly, Rhode Island 02891
Citizenship	US
Post Office Address	14 South Drive, Westerly, Rhode Island 02891, USA